

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 June 2004 (03.06.2004)

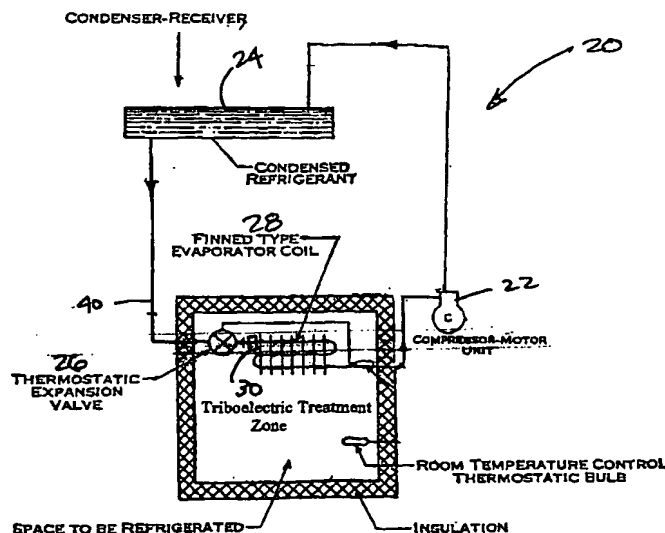
PCT

(10) International Publication Number  
WO 2004/046620 A2

- (51) International Patent Classification<sup>7</sup>: F25B
- (21) International Application Number: PCT/US2003/036643
- (22) International Filing Date:  
14 November 2003 (14.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/426,302 14 November 2002 (14.11.2002) US
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR ENHANCING HEAT PUMP AND REFRIGERATION EQUIPMENT PERFORMANCE



(57) Abstract: A vapor compression apparatus and a method for operating a vapor compression system are provided. A working fluid is conveyed through a vapor compression system having a fluid line. A charging element is connected to the fluid line to direct an electric charge into working fluid. The electric charge is operable to disrupt intermolecular forces and weaken intermolecular attraction to enhance expansion of the working fluid to the vapor phase, increasing the capacity, performance and efficiency of the system components, and reducing system cycling mechanical wear and energy consumption.